

NEW SPECIES OF SERICA (SCARABÆIDÆ). VIII

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The species of *Serica* are numerous and the external characters few and often variable. Consequently the usual descriptions do not suffice for the identification of the species. The characters of the male genital armature should be considered first and the descriptions of external characters used as a supplement.

The relative sizes of head, eyes, clypeus and antennæ vary somewhat between the various species of *Serica*, and are therefore in general of value in differentiating the species. Since subjective impressions of measurements are not very reliable, actual measurements in tenths of a millimeter have been calculated from micrometer measurements and are given in the following descriptions. While the student may not so measure his specimens he will at least have definite statements of size and proportion to aid him in making judgments.

***Serica arkansana*, new species.**

♂. Length 8 mm.; width 4.5 mm. Color chestnut brown, glabrous and shining.

Clypeus nearly flat, slightly depressed before the moderately reflexed lateral edges. Anterior margin rather strongly reflexed and arcuately bent, separated from the sides by a narrow V-shaped notch. Surface closely punctured, the punctures separated by not more than their diameter, and tending to crowd together into irregular lines. Clypeal suture fine but distinct. Front less closely punctured, especially above. Measurements of head in tenths of a mm.: diameter through eyes, 22.1; distance between inner eye margins, 13.6; extreme width of anterior reflexed margin of clypeus, 10.3; antennal club, 8; dorso-ventral diameter of eye, 8.6.

Pronotum with the disc rather evenly, but less closely punctured than the head. Punctures separated by one to three diameters, except in a narrow area near the sides where the punctures are crowded to about half their diameter. Width through posterior angles, 35; width through anterior angles, 22.2; median length, 19.3.

Elytra bare except for a single row of sparse, short, yellow hairs on the lateral margins; definitely striated, the grooves densely punctured, and the intervals anteriorly and laterally nearly impunctate. Punctures crowding over the first two (sutural) intervals anteriorly and covering them rather evenly as they flatten over the posterior curvature.

Genital armature of male 2.2 mm. in length; figured on Plate IX.

♀. Very similar to the male, antennal club only very slightly smaller, and clypeal notch narrower; more readily recognized by the evenly convex under surface of the abdomen and the less emarginate last ventral plate.

Type: ♂, Washington Co., Arkansas, April 6, 1938. (Ill. Nat. Hist. Survey Col.)

Paratypes: 11 ♂, 14 ♀, all from Arkansas: Fayetteville, 1 ♂; Franklin Co., 1 ♂, 4 ♀; Miller Co., 1 ♀; Washington Co., 9 ♂, 9 ♀. Most of the specimens were collected by Milton W. Sanderson and generously loaned to the writer for description.

Arkansana is most closely related to the *texana-atratula* complex of species, reviewed in this paper.

Serica atratula Le Conte.

1856. *Serica atratula* Le Conte, Jour. Acad. Nat. Sci. Phil., (2) III, p. 274.

The following description, based on type #2 in the Le Conte collection, is given in full as it was written some years ago.

♂. Length 6 mm.; width 3.3 mm. Color piceous black, surface polished and shining.

Clypeus very slightly depressed below the suture and vaguely tumid beyond the middle; anterior margin moderately reflexed, viewed perpendicularly, feebly and evenly arcuate, viewed at an angle from above, strongly and evenly curved; lateral margins only moderately elevated, separated from the anterior margin by rather strong, deep and subacute lateral incisures; puncturation strong and deep, but not coarse, the punctures separated by about half their own diameter and frequently partially coalescing. Clypeal suture nearly arcuate, fine and inconspicuous. Front less regularly and densely punctured, the punctures coalescent to separated by two to three diameters. Antennæ with the club pale testaceous and about the same length as the exposed portion of the stalk, which is darker colored, especially toward the base. Eyes rather small. Measurements of head: diameter through eyes, 18; distance between inner eye margins, 12; extreme width of anterior reflexed margin of clypeus, 8; antennal club, 7; dorso-ventral diameter of eye, 6.

Pronotum rather strongly convex, with the lateral margins viewed from the side only feebly arcuate, and viewed from above

but little convergent until the anterior third. Just in front of the scutellum the pronotum rather more convex, prominent and posteriorly produced than usual. Posterior angles distinct and rectangular. Puncturation rather strong, distinct and moderately coarse, and quite regularly distributed, the punctures separated on the average by about their own diameter. Measurements of pronotum: width through posterior angles, 27; width through anterior angles, 18; length on median line, 17.

Elytra rather strongly and deeply furrowed, the sulci with three confused rows of strong, closely crowded or coalescent punctures, the impunctate interspaces very narrow and somewhat irregular from the encroachment of the adjacent, coarse punctures; length, 40; width, 33.

Metasternum and posterior coxal plates strongly but irregularly punctured. Abdominal sternites finely punctured, the punctures separated by one to four times their own diameter; the transverse rows of ambulatorial setæ inconspicuous because of the dark brown color against the blackish integument; sternites unmodified.

Genital armature of male (Plate X) only moderately asymmetrical, length 1.8 mm.

♀. Differs from the male in having the clypeal margin less elevated, the apical margin scarcely higher than the lateral margins, and the clypeal notch feeble and acute; antennal club but slightly smaller than that of the male (6.2 instead of 7).

Specimens examined:

Texas: "Texas" 2 ♂ (Le Conte types); Dallas, 1 ♀.

Oklahoma: Harrah, 1 ♂, 2 ♀; Oklahoma City, 1 ♀; Payne Co. (near Ripley) W. J. Brown, April and May, on Oak, 239 ♂, 230 ♀.

In the Oklahoma series from Payne Co. there are intergrades in color from piceous black to amber brown, some four or five per cent of the specimens being as light as typical *texana*. The intergradation of color and the frequent occurrence of light and dark individuals taken together in copula establishes the specific identity of the amber-brown and black color phases.

The radical color difference and the fact that the black phase seems not to occur in the eastern part of the range of the species justified the use of a subspecific name to designate the pallid form.

Serica atratula monita, new subspecies.

Name applied to the pallid eastern race of *atratula*.

Type ♂, Longview, Texas (about 40 miles east of Dallas) April 26, 1937 (R. W. Dawson). (California Academy of Sciences.)

Specimens examined:

Texas: "Texas," 4 ♂, 3 ♀; Longview, 46 ♂, 64 ♀; Dallas, 1 ♂; Harris Co., 1 ♀; San Antonio, 1 ♀.

Oklahoma: "Ind. T.," 2 ♂; Payne Co. (Intergrades with typical *atratula*.)

Louisiana: "La.," 1 ♀; Vowell's Mill, 1 ♂, 4 ♀; Winnfield, 1 ♀.

Serica texana Le Conte.

1856. *Serica texana* Le Conte, Jour. Acad. Nat. Sci. Phil., (2) III, p. 274.

There are five specimens in the Le Conte series of "*texana*"; numbers 1 and 2 are females, 3, 4, and 5 are males. Presumably the first four served as cotypes, and #5 was added later. Since Le Conte did not designate holotypes, it was necessary in handling his collection to number serially all specimens of each species in the order in which he left them, and to declare number one *the* type in order to settle questions of identity in composite series. It is not clear that the *texana* series is homogeneous, and since only the males can be positively identified, the first male (#3) is here declared to be the holotype. It is the specimen used in drafting the figures on Plate XI, and in taking the measurements which follow.

Texana is almost a perfect counterpart of *amula*. A comparison of the measurements shows that *texana* has relatively somewhat smaller eyes and shorter antennal clubs.

Measurements of head: diameter through eyes, 20.5; distance between inner eye margins, 12; extreme width of anterior reflexed margin of clypeus, 8; dorso-ventral diameter of eye, 9.

Definite determination is to be made only on the examination of the male genital armature. The stalk of the armature is less inflated, less curved and less attenuated at the apex than in *amula*. The right side of the stalk is definitely longer than the left, and the right clasper broad at the base and deeply emargi-

nate near the middle. The dorsal membrane extends further down the back of the stalk.

Le Conte records: "Found at Ft. Gates, Texas, by H. Halde-
man."

A single specimen in the writer's collection exactly matches the Le Conte type (#3). It bears the data: Lee Co., Texas, March, 1912 (Rev. G. Birkmann). Otherwise the species is unknown to the writer.

***Serica contorta*, new species.**

♂. Length 7 mm.; width 4 mm. Color light brown (amber brown to argus brown), polished and shining. Striæ and margins of elytra with short, inconspicuous hair in sparse single rows.

Clypeus exactly continuous with the slight convexity of the front; suture fine and arcuate (rather than angled), sides moderately reflexed, front margin strongly, vertically reflexed; when viewed from above (dorsally) strongly bowed to subangulate at the middle; a few erect hairs at the base of the reflexed margin. Clypeal notch broad and deep, completely dividing the apical from the lateral reflexed margins. Surface strongly punctured, with the punctures separated by about their own diameter. Front sparsely and less strongly punctured than the clypeus.

Measurements of head: diameter through eyes, 21.4; distance between inner eye margins, 10.1; extreme width of anterior reflexed margin, 8; antennal club, 9.3; dorso-ventral diameter of eye, 9.3 (which is relatively large).

Pronotum moderately punctured. Punctures of the disc separated by one to three diameters, of the margins by about one diameter. Measurements of pronotum: width through posterior angles, 31.4; through anterior angles, 23; median length, 18. Elytra strongly striated, the grooves with about three confused rows of closely placed punctures, the intervals almost impunctate.

Genital armature of male (Plate XII) strikingly asymmetrical, the right clasper strangely scrolled ("contorted") with the basal, comma-shaped portion minutely, densely punctured or shagreened. No attempt was made to indicate this surface modification in the figure of the armature. Length of armature, 2 mm.

♀. Differs from the male by the shorter antennal club (6.4 instead of 9.3), the wider anterior, reflexed margin of the clypeus (9.3 instead of 8) which is less deeply and widely separated from the lateral margins, and which is also less strongly elevated and less sub-angulate medially. A character of some value (if examined with a binocular microscope) is to be seen in the anterior declivity of the submentum. This sloping area is somewhat more shining, bare and sharply defined than in the other similar species, and somewhat more evident than in the male.

Type: ♂. Wills Point, Texas, April 29, 1937 (feeding on oak at night) R. W. Dawson. (California Academy of Sciences.)

Paratypes: Same data as the type, 101 ♂; 47 ♀; Longview, Texas, April 26, 1937, 6 ♂, 14 ♀; "Tex.," 3 ♂.

Arkansas: Miller Co., May 8, 1939, 1 ♂.

Oklahoma: Cloudy, May 4, 1940, 1 ♂.

Serica æmula, new species.

♂. Length 8 mm.; width 4 mm. Color as in *contorta*, which species it so closely resembles that the description may best be given by comparisons.

Clypeus with a vague, transverse depression below the suture, which appear slightly calloused, and is more evident than in *contorta*. Another and more distinct depression extends between the broad, deep clypeal notches, thus a vague transverse ridge is defined just below the middle of the clypeus. Puncturation coarser and denser than in *contorta*; and anterior reflexed margin evenly arcuate (when viewed dorsally and from the rear) instead of subangulate medially as in *contorta*. Declivity of the submentum not quite so clearly defined.

Measurements of head: diameter through eyes, 22.1; distance between inner eye margins, 10; extreme width of anterior reflexed margin, 9; antennal club, 9.3; dorso-ventral diameter of eye, 9.5; thus the measurements support the impression of slightly larger eyes.

Pronotum with slightly deeper and coarser puncturation, measurements the same as in *contorta*. Elytra likewise with stronger puncturation, more evidently covering the two sutural intervals especially posteriorly.

The differences noted are such as one appreciates best after carefully comparing series of specimens, and which one would doubtless discount as ordinary variation were it not for the radical differences in the genital armatures of the two species.

Genital armature of male (Plate XIII) characterized by the inflated stalk with its attenuated, asymmetrical apex, and by the delicate, arcuate claspers. Length of armature, 2 mm.

♀. Differs from the male by having the clypeal margins less elevated and the clypeal notch sharp and narrow, scarcely or not dividing the reflexed margin; width of anterior reflexed margin greater than in the male, 9.5 instead of 9; antennal club, 7; dorso-ventral diameter of eye, 7.2.

Type: ♂. Conroe, Texas, March 26, 1933 (H. A. Budde). (U. S. Nat. Mus. Col.)

Paratypes: 17 ♂, 4 ♀ with the same data as the type; 1 ♂ College Station, Texas; 1 ♂ "Fla."

Serica anthracina Le Conte.

1856. *Serica anthracina* Le Conte, Jour. Acad. Nat. Sci. Phil., (2) III, p. 276.

1856. *Serica frontalis* Le Conte, l.c., p. 276.
1856. *Serica robusta* Le Conte, l.c., p. 276 (not *robusta* Blanchard, 1850).
1869. *Serica valida* Harold, L'Abeille, VI, p. 123 (new name for *robusta* Le Conte).
1866. *Serica crassata* Walker, Naturalist in Brit. Col., II, p. 323.

Anthracina is one of the most widely distributed of our western species of *Serica*. It is common from southern California to British Columbia, occurring in diminishing numbers to central New Mexico, central Colorado, extreme western Nebraska, the Black Hills region of South Dakota, and central Montana. Over this wide range some geographical (perhaps better "ecological") variation occurs, but it is not apparent to the writer after examining approximately 1,000 specimens that races or forms can be defined with clarity or profit.

The color varies from uniform testaceous to black. In general the lighter phases are eastern in distribution, and the darker, western. In California occasional specimens occur showing a striking color variation. The whole body is black except the elytra which are contrastingly bright reddish testaceous. Various intergrades in color between this form and the brownish black to pure black forms also are frequent. All may be collected together at the same time in the same local population, as was done by F. T. Scott, May 25, 1937, at Kaweah P. O., California. One of the red-winged specimens from the series just mentioned was used for drafting the accompanying figures of the male genital armature (Plate XIV).

Size as well as color also shows marked variation. Specimens from the dryer plains regions are smaller (Ardmore, S. D., length 5 mm.) and from the more humid mountain regions are larger (Forest Grove, Oregon, 8.5 mm.).

There is some variation in the form of the genital armature, especially in the outline of the apex of the claspers, but no other species closely resembles *anthracina* and the figures given should serve for definite determination.

Serica fimbriata Le Conte.

1856. *Serica fimbriata* Le Conte, Jour. Acad. Nat. Sci. Phil., (2) III, p. 275.

♂. Length 10.5 mm.; width 6.5 mm. Color bright chestnut brown to fulvous with a strong velvety opacity. Under surface and legs, especially the front and middle ones, with an ample covering of long, erect, fulvous hair. Pronotal and elytral margins fimbriate with long, stiff, fulvous hair.

Clypeus shining, finely, densely and evenly punctured; punctures separated by about one-half their diameter. Clypeal margins strongly reflexed, especially the anterior margin which is subtended by a shallow, shining and almost impunctate groove. When viewed vertically the anterior margin shows a crenate outline of rounded corners and strongly bent middle, when viewed at a strong angle from above the corners and middle are slightly prominent, giving an evenly rippled outline. Clypeal notch obsolete, but a faint calloused line marks the position for the notch. Front and pronotum opaque and velvety in luster with rather numerous, very minute, shallow, shining or silvery punctures. (In old or greasy specimens the punctures appear larger and dark colored, and the velvety luster is obscured.)

Measurements of head: diameter through eyes, 25.7; distance between inner eye margins, 17.2; dorso-ventral diameter of eye, 7.9; antennal club, 8.2.

Measurements of pronotum; width through posterior angles, 4.7 mm.; width through anterior angles, 2.7 mm.

Elytra with fine, line-like striæ, which are only feebly impressed. Striæ with a somewhat confused, single row of very minute, shallow, shining punctures, more numerous and spreading upon the intervals basally. Discal striæ with a few inconspicuous, short, fulvous hairs, last, lateral stria with an evident, "fimbriate" row of hair.

The most distinctive feature of the genital armature of the male (Plate XV) is the broad, falcate base of the right clasper.

Fimbriata is the largest and most robust of the American species. Its opaque, reddish brown color and ample coat of fulvous hair on the ventral side mark it easily from all but the following species.

♀. Distinguished from the male by more robust form, slightly smaller antennal club and less emarginate last sternite.

Habitat: Southern California, San Diego Co. and vicinity.

Serica satrapa, new species.

Closely resembles *fimbriata* with which it has been confused. It may well be defined by comparison with that species.

♂. Length 10 mm.; width 6 mm. Thus it is seen to be slightly smaller and definitely narrower. The color averages a little lighter, more fulvous than chestnut, and the opacity is not quite so dense. It is similarly fimbriate and hairy beneath, but the hair is slightly finer and slightly lighter in color. The striae and punctures are even less evident, and the row of hairs on the last lateral stria much less developed.

Since these characters are in degree only, they are insufficient for certain identification without an examination of the male genital armature (Plate XVI). Here the most outstanding character is in the right clasper, in its narrow, inwardly flexed base, and sharp basal thorn. The left clasper is broader apically and the stalk more flaring and asymmetrical apically.

Type: ♂. El Monte, California (near Riverside) May 28, 1937 (R. W. Dawson). (California Academy of Sciences.)

Paratypes: 200 ♂, 226 ♀ with the same data. Fully two quarts of additional specimens were discarded. All were taken in the top three inches of cultivated soil under small plum trees which were being defoliated by the nocturnal feeding of the beetles. Additional specimens are from: Alhambra, Claremont, Haynes, Laguna Beach, Los Angeles Co., Morongo, Mt. Wilson, Ontario, Pasadena, and Cajon Pass.

Serica porcula Casey.

1884. *Serica porcula* Casey, Contr. to Desc. and Syst. Coleopterology of N. A. II, p. 177.

1902. *Serica porcula* Casey, Berl. Ent. Zeitschrift, 47, p. 38. (Copied by Brenske.)

Except for the radical differences in the genital structures one would not be inclined to differentiate *porcula* and *concinna* as distinct species. Mixed series of the two, however, may be separated with reasonable accuracy on the basis of the following characters: In *porcula* the clypeal margins are distinctly narrower and less elevated; the puncturation of the clypeus and front somewhat denser, and the clypeal suture a little more nearly arcuate.

The pronotum of *porcula* is relatively a little broader, less convex, the sides a little straighter and the anterior angles definitely more bluntly rounded. The margins of the pronotum and elytra

are less conspicuously fimbriate—the hairs shorter and less numerous.

On the basis of the male genital armature (Plate XVII) one easily recognizes *porcula*.

Specimens examined:

Arizona, 158: Benson, Chiricahua Mts., Globe, Grand Canyon, Huachuca Mts., Nogales, Palmerlee, Pinal Mts., Prescott, Santa Rita Mts., Verde Valley, White Mts., Williams.

New Mexico, 5: Dripping Spring, Organ Mts.

Texas, 1: Alpine.

Colorado, 1: Colorado Springs.

The specimen used in drafting the plate of the male genital armature (Plate XVII) bears the label "Benson, Ar. Ricks."

Serica concinna, new species.

♂. Length 8 mm.; width 4 mm. Color auburn brown (varying in series, from light to dark) polished and shining, but with an extremely minute alutaceous surface texture which slightly deadens the luster. Margins of pronotum and elytra fimbriate with light, coarse hairs.

Clypeus relatively broad, densely punctured, the punctures confluent to separated by half their diameter. Clypeal margins moderately reflexed with the clypeal notch almost obsolete, its position recognizable on some specimens and not on others. Anterior reflexed margin finely and densely punctured, moderately bowed or bent at the middle, and when viewed at an angle from above nearly straight with rounded corners. Clypeal suture fine and inconspicuous.

Lower part of front densely punctured like the clypeus, but occipital region broadly impunctate. Measurements of head: diameter through eyes, 18.6; distance between inner eye margins, 13.2; anterior reflexed margin between the sub-obsolete clypeal notches, 15.6; antennal club, 5.7; dorso-ventral diameter of eye, 6.7.

Pronotum convex with arcuate sides, strongly punctured, the punctures separated by one to three diameters, except for a small postero-lateral area where they are crowded to scarcely half a diameter apart. Measurements of pronotum: width through posterior angles, 30.4; width through anterior angles, 19.7; median length, 19.

Elytra with narrow, closely and strongly punctured striae, and nearly uniform, feebly convex intervals, with many scattered, coarse punctures. Elytra with short, very sparse, deciduous, pale hairs.

Metasternum and posterior coxal plates with strong, coarse punctures. Posterior third of hind femora with a dense band of coarse, variable punctures extending from base to apex.

Genital armature of male (Plate XVIII) symmetrical, with a relatively coarse stalk and small claspers.

♀. Differs from the male only by the usual sexual characters,—a very slightly smaller antennal club, more convex underline of the abdomen and less emarginate last sternite.

Type ♂. South Rim of Grand Canyon, Arizona, May 23, 1937 (R. W. Dawson). (California Academy of Sciences.)

Paratypes, 27 ♂, 34 ♀, Grand Canyon, May 23 and 24, 1937, feeding on Cliff Rose (*Cowania stansburiana*) about an hour before sunset, and 1 ♂, 1 ♀, Astec, N. M., July 15, 1899 (G. W. Bock).

Serica laguna Saylor.

1935. *Serica laguna* Saylor, Pomona Jour. Ent. and Zool., 27, p. 1.

In the form of the male genital armature *Serica laguna* shows relationship to *porcula*, as well as to *scarli* and *alleni* as noted by Saylor. Externally *laguna* also resembles *concinna* here described.

A figure of the armature of *laguna* (Plate XIX) is presented for comparison with *porcula*.

Additional records of specimens: Laguna Mts., San Diego Co., June 3, 1937 (R. W. Dawson) 13 ♂, 11 ♀ on *Ceanothus palmerii*. San Jacinto Mts., June 30, 1933 (R. H. Beamer) 1 ♂, 1 ♀; Warner's San Diego Co., July, 1919 (Geo. H. Field) 1 ♂; Idyllwild, Riverside Co., July 4, 1929, 2 ♂ (recorded by Saylor).

Serica subnisa, new species.

♂. Length 8 mm.; width 5 mm. Color brown (chestnut to bay) with a distinct rainbow iridescence on the elytra. Striæ of elytra with a few minute, pale hairs, and margins of elytra and pronotum moderately fimbriate.

Clypeus broad, strongly punctured; the punctures confluent in irregular lines, to separated by their own diameter. Margins broadly but moderately elevated; the lateral margins nearly as strong as the apical margin. Clypeal notch indicated only by a suture or an obscure line; corners very broadly rounded and middle of apical margin arcuately bent. Viewed at a strong angle from above nearly straight across, with the corners and middle slightly more prominent. Clypeal suture obscure, arcuate and vaguely but broadly impressed. Front with smaller, scattered punctures.

Measurements of head; diameter through eyes, 20; distance between inner eye margins, 14.3; dorso-ventral diameter of eye, 6.8; antennal club, 5.3.

Pronotum moderately, rather uniformly punctured; punctures separated by one to three diameters. Surface shining, slightly pruinose and iridescent. Width through posterior angles, 34.3; width through anterior angles, 20.7; median length, 18.6.

Elytral striæ line-like with a single, somewhat confused row of closely placed punctures. Intervals with scattered punctures.

Metasternum and posterior coxal plates, especially the latter, with strong punctures, separated by one to four diameters.

Genital armature of male (Plate XX) resembling somewhat that of *repanda*, and less closely that of *falcata*. Some variation occurs in the shape of the claspers as is indicated by the additional outline figures.

Type: ♂. Kaweah P.O., California, June 10, 1937 (R. W. Dawson). (California Academy of Sciences.)

Paratypes: 3 ♂, 5 ♀, collected at the same time and place on red-bud trees at night.

Serica catalina, new species.

♂. Length 8 mm.; width 4.5 mm. Color brown (light to dark auburn) bare and shining with a trace of metallic or brassy iridescence.

Clypeus finely and densely punctured; the punctures separated by about half their diameter. Lateral margins feebly elevated, and anterior margin only moderately so. Clypeal notch obsolete. Clypeal suture arcuate, very fine and obscured by the puncturation. Front more coarsely and irregularly punctured, becoming impunctate toward the occipital region.

Measurements of head: diameter through eyes, 19.6; distance between inner eye margins, 12.1; dorso-ventral diameter of eye, 7.1; antennal club, 7.1.

Pronotum closely and rather evenly punctured, a little more densely so near the posterior angles, punctures separated by one to two diameters. Measurements of pronotum: width through the posterior angles, 32.1; width through the anterior angles, 20; median length, 18.6.

Elytra with striæ rather sharply lined, with three dense, confused rows of punctures crowding upon the intervals. Beneath nearly bare; metasternum and posterior coxal plates, especially the latter, coarsely and closely punctured.

Genital armature of the male (Plate XXI) symmetrical. The nearly parallel sided claspers constitute a distinctive character.

Type: ♂. Avalon, Santa Catalina Island, California, May 24, 1932 (Don. Meadows). (Snow Collection, University of Kansas.)

Paratypes: 11 ♂, 10 ♀, all from Santa Catalina Island: 1 ♂, May (A. Fenyés) and the remainder from Avalon, May 2-28, 1932 (Don. Meadows).

Additional data on three little known species of *Serica*:

Serica tantula Dawson.

1922. *Serica tantula* Dawson, Jour. N. Y. Ent. Soc., XXX, p. 162.

Tantula was described from a single male taken at Lake Worth, Florida. Since the original description three additional Florida specimens have come to hand:

Melbourne, March 10, 1938 (R. Kempfer) 1 ♂.

Boca Raton, March 21, 1944 (E. R. Tinkham) 1 ♂, 1 ♀.

Serica mixta Le Conte.

1856. *Serica mixta* Le Conte, Jour. Acad. Nat. Sci. Phil., (2) III, p. 276.

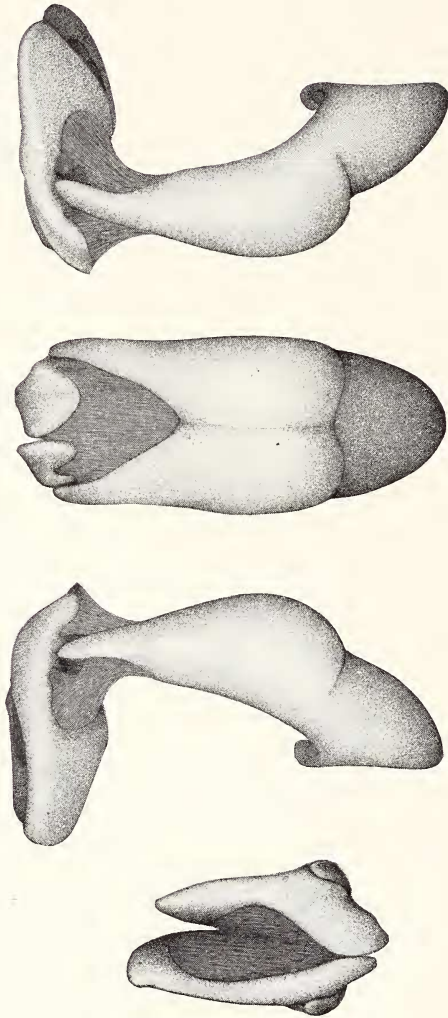
1922. *Serica mixta* Dawson, Jour. N. Y. Ent. Soc., XXX, p. 166.

In addition to the three male specimens in the Le Conte collection from San Diego, California, the only specimens that have ever come to the writer's attention are the following: 1 ♂ in the Berlin Museum without definite locality label; 4 ♂ in the Blaisdell collection from Coronado, California; 1 ♂, 1 ♀ in the Van Dyke collection, also from Coronado. The Coronado specimens were taken May 6 and 23, 1890.

Serica abdita Dawson.

1921. *Serica abdita* Dawson, Jour. N. Y. Ent. Soc., XXIX, p. 166.

In addition to the type in the Le Conte collection, the writer has seen only the following specimens, all from California: Bakersfield, 1 ♂, 1 ♀; Kern Co., 3 ♂; Tejon Canyon, Kern Co., 1 ♂; Tulare Co., 1 ♂.



Serica arkansana n. sp.